BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work:"Consultancy services for preparation of DPR for the work of Asphalting to roads at Sai Archade,G Ramaiah, and surrounding areas in ward no -03 Yelahanka Satellite Town sub Division" Est cost Rs. 200 Lakhs

		Estimate Cost Rs.							20000000
Sl No	**Description of item**	**Unit**	**No**	**L**	**B**	**D**	**Qty**	**Rate**	**Amount**
1	**Removing & Refixing** stone slabs of drains and pointing in C.M (1:3) (Page No 27., I.No.5.33 of KPWD S.R 2018-19).								
		Sqm							
	Sai Arcade								
	Sai Arcade 1st Main Road			165					
	Sai Arcade 3rd Cross Road			120					
	Sai Arcade 2nd Cross Road			120					
	Sai Arcade 1st Cross Road			115					
	Sai Arcade 2nd Main Road			135					
	Sai Arcade 1st Cross 1st A sub Road			41					
	Sai Arcade 1st Cross 1st B sub Road			40					
	Lake Road			332					
		Total length		**1068**					
	A)For top covering slab		2	1068	0.75		1602.00		
	Consider 30% for removing and refixing					**Total**	**480.60**		
	B)For B.S Slab drain		2	1068	1.5		3204.00		
	Deduct 30% for damaged and missing slabs						961.20		
					Sub Total		**2242.80**		
	Consider 30% for removing and refixing					**Total**	**672.84**		
						Sqm	**1153.44**	**111.3**	**128378**
	Basic Rate	**105**							
	Area Weightage @ 6%	**6.3**							
	Total	**111.3**							
2	Providing **granite slabs** of selected quality roughly dressed and fixed in cement mortar(1:6) including fixing curing etc, complete -do- 7.5 cms thick Page No. 27/ Item No. 5.31.1/ PWD SR 2018-19 (size: 3x0.55)								
		Sqm							
	B.S Slab drain								
	G Ramaiah Layout 1st Cross RHS		2	85	1.65		280.5		
	G Ramaiah Layout 2nd Cross RHS		2	80	1.65		264		
	For Missing and damaged slabs (30%)						961.20		
						Sqm	**1505.70**	**742**	**1117229**
	Basic Rate	**700**							
	Area Weightage @ 6%	**42**							
	Total	**742**							
3	KSRRB 300-1. **Earth work excavation** by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. P No. 143/ Item No. 19.1/ PWD SR 2018-19								
		Cum							
	Drain Desilt								
	Sai Arcade								
	Sai Arcade 1st Main Road		2	165	0.5	0.3	49.50		
	Sai Arcade 3rd Cross Road		2	120	0.5	0.3	36.00		
	Sai Arcade 2nd Cross Road		2	120	0.5	0.3	36.00		
	Sai Arcade 1st Cross Road		2	115	0.5	0.3	34.50		
	Sai Arcade 2nd Main Road		2	135	0.5	0.3	40.50		
	Sai Arcade 1st Cross 1st A sub Road		2	41	0.5	0.3	12.30		
	Sai Arcade 1st Cross 1st B sub Road		2	40	0.5	0.3	12.00		
	Lake Road		2	332	0.5	0.3	99.60		
	New Road								
	G Ramaiah Layout 1st Cross RHS		1	85	5	0.3	127.50		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5	0.3	132.00		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	RCC Drain								
	G Ramaiah Layout 2nd Cross		2	190	1.1	1	418.00		
	G Ramaiah Layout 1st Cross		2	188	1.1	1	413.60		
	B.S Slab drain								
	G Ramaiah Layout 1st Cross RHS		2	85	0.45	0.45	34.425		
	G Ramaiah Layout 2nd Cross RHS		2	80	0.45	0.45	32.4		
	Lake Road (Road Cut Portion)		1	332	2	0.3	149.40		
	Restoration of Cutting (15% of the total length of road)		1	138	6	0.45	372.60		
						Cum	2000.33	**137.8**	**275645**
	Basic Rate	130							
	Area Weightage @ 6%	7.8							
	Total	137.8							
4	KSRB-4-1.3 : Providing and laying in position **plain cement concrete of mix M 1:4:8** withOPC cement at 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2,P No. 13/ Item No. 4.3/ PWD SR 2018-19								
	RCC Drain	Cum							
	G Ramaiah Layout 2nd Cross		2	190	1.1	0.15	62.70		
	G Ramaiah Layout 1st Cross		2	188	1.1	0.15	62.04		
						Cum	124.74	**5408.12**	**674609**
	Basic Rate	**5102**							
	Area Weightage @ 6%	306.12							
	Total	5408.12							
5	KSRB 4.2.2 : Providing and laying in position **plain cement concrete of mix M20** withOPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @0.43cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc, complete excluding cost of stell as per MORTH specification NO. 1500, 1700, 2200. Including cost of materials, labour, HOM complete as per specifications. Item No. 37.59.2/ page no:271/PWD SR 2018-19								
	RCC Drain	Cum							
	G Ramaiah Layout 2nd Cross								
	Raft		2	190	0.9	0.15	51.30		
	Side Walls		4	190	0.15	0.7	79.80		
	G Ramaiah Layout 1st Cross								
	Raft		2	188	0.9	0.15	50.76		
	Side Walls		4	188	0.15	0.7	78.96		
						Cum	260.82	**5998.54**	**1564539**
	Basic Rate	**5659**							
	Area Weightage @ 6%	339.54							
	Total	5998.54							
6	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio (I No-28.8.2,P No-229)								
	RCC Drain	**Tonne**							
	60kg/Cum For Drain		60	260.82			15649.2		
						Tonne	**15.6492**	**72326.98**	**1131859**
	Basic Rate	**68233**							
	Area Weightage @ 6%	4093.98							
	Total	72327							
7	KSRB 4-6.7 : Providing and removing **centering, shuttering, strutting**, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1 m in depth including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 17/ Item No. 4.34/ PWD SR 2018-19								
	RCC Drain	Sqm							
	G Ramaiah Layout 2nd Cross		2x4	190	0.7		1064		
	G Ramaiah Layout 1st Cross		2x4	188	0.7		1052.8		
						Sqm	2116.80	**309.52**	**655192**
	Basic Rate	**292**							
	Area Weightage @ 6%	17.52							
	Total	309.52							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
8	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.146, I.No.19.56)								
		Sqm							
	Reconstruction								
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6		990.00		
	Sai Arcade 3rd Cross Road		1	120	5		600.00		
	Sai Arcade 2nd Cross Road		1	120	5		600.00		
	Sai Arcade 1st Cross Road		1	115	6		690.00		
	Sai Arcade 2nd Main Road		1	135	5.5		742.50		
	Sai Arcade 1st Cross 1st A sub Road		1	41	3.5		143.50		
	Sai Arcade 1st Cross 1st B sub Road		1	40	3.5		140.00		
						Sqm	3906.00	**40.38**	**157724**
	Basic Rate	39							
	Area Weightage @ 6%	1.38							
	Total	40.38							
9	KSRRB M300-59.2: loosening, leveling and compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in table 300-2 for embankment construction, complete as per specifications, case-II: compacting original ground supporting embankment, (which includes watering charges & compaction by vibratory roller) MORTH specification No. 3.5.3.4 Page No. 146. Item No. 19.66/ PWD SR 2018-19								
		Sqm							
	Reconstruction								
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6		990.00		
	Sai Arcade 3rd Cross Road		1	120	5		600.00		
	Sai Arcade 2nd Cross Road		1	120	5		600.00		
	Sai Arcade 1st Cross Road		1	115	6		690.00		
	Sai Arcade 2nd Main Road		1	135	5.5		742.50		
	Sai Arcade 1st Cross 1st A sub Road		1	41	3.5		143.50		
	Sai Arcade 1st Cross 1st B sub Road		1	40	3.5		140.00		
	New Road								
	G Ramaiah Layout 1st Cross RHS		1	85	5		425.00		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5		440.00		
						Sqm	4771.00	**25.34**	**120897**
	Basic Rate	23							
	Area Weightage @ 6%	2.34							
	Total	25.34							
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	New Roads	Cum							
	G Ramaiah Layout 1st Cross RHS		1	85	5	0.15	63.75		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5	0.15	66.00		
	Lake Road (Road Cut Portion)		1	332	2	0.15	74.70		
	Restoration of Cutting (15% of the total length of road)		1	138	6	0.15	124.20		
						Cum	328.65	**1994.92**	**655630**
	Basic Rate	1882							
	Area Weightage @ 6%	112.92							
	Total	1994.92							
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
		Cum							
	New Road								
	G Ramaiah Layout 1st Cross RHS		1	85	5	0.23	97.75		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5	0.23	101.20		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6	0.23	227.70		
	Sai Arcade 3rd Cross Road		1	120	5	0.23	138.00		
	Sai Arcade 2nd Cross Road		1	120	5	0.23	138.00		
	Sai Arcade 1st Cross Road		1	115	6	0.23	158.70		
	Sai Arcade 2nd Main Road		1	135	5.5	0.23	170.78		
	Sai Arcade 1st Cross 1st A sub Road		1	41	3.5	0.23	33.01		
	Sai Arcade 1st Cross 1st B sub Road		1	40	3.5	0.23	32.20		
	Lake Road (Road Cut Portion)		1	332	2	0.23	114.54		
	Restoration of Cutting (15% of the total length of road)		1	138	6	0.23	190.44		
						Cum	1402.31	**2001.28**	**2806415**
	Basic Rate	1888							
	Area Weightage @ 6%	113.28							
	Total	2001.28							
12	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
		Sqm							
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6		990.00		
	Lake Road (Road Cut Portion)		1	332	2		498.00		
	Restoration of Cutting (15% of the total length of road)		1	138	6		828.00		
						Sqm	2316.00	**33.92**	**78559**
	Basic Rate	**32**							
	Area Weightage @ 6%	**1.92**							
	Total	**33.92**							
13	KSRRB 500-11. Providing and laying **bituminous macadam** on Prepared Surface with crushed Coarse aggregates as per Design mix formulae for base/binding course including loading of aggregates with F.E loader,Hot mixing of Stone aggregates and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve desired density, but excluding cost of primer/Tack coat including lead, lift and cost of all materials, labour HOM of machinaries complete as per Specifications. MORTH Ch 5. using 40/60 TPH capacity HMP with Mechanical paver Gr-II (50mm - 75mm) with 3.4% VG-30 bitumen.(P.No-159,I No-21.11.6)								
		Cum							
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6	0.05	49.50		
	Lake Road (Road Cut Portion)		1	332	2	0.05	24.90		
	Restoration of Cutting (15% of the total length of road)		1	138	6	0.05	41.40		
						Cum	115.80	**5962.5**	**690458**
	Basic Rate	**5625**							
	Area Weightage @ 6%	**337.5**							
	Total	**5962.5**							
14	KSRRB M500-2: **Cleaning the excisting** black topped surface with brooms, soft brushs and finally dusting with old gunny bags and compressed air to receive bituuminous tratement including cost of all materials, labours, HOM complete as per specifications. P No. 158/ Item No. 21.2/ PWD SR 2018-19								
			Sqm						
	G Ramaiah Layout								
	G Ramaiah Layout Main Road		1	370	6.5		2405.00		
	G Ramaiah Layout 2nd Cross		1	190	5.5		1045.00		
	G Ramaiah Layout 1st Cross		1	188	5.5		1034.00		
	Lake Road		1	332	6.5		2158.00		
						Sqm	6642.00	**5.3**	**35203**
	Basic Rate	5							
	Area Weightage @ 6%	0.3							
	Total	5.3							
15	KSRRB M500-10. Tack Coat:- Providing and applying **tack coat** using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechancial broom. complete as per specifications. MORTH Specification No. 503 (P-159, Item.no 21.10).								
		Sqm							
	G Ramaiah Layout								

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	G Ramaiah Layout Main Road		1	370	6.5		2405.00		
	G Ramaiah Layout 2nd Cross		1	190	5.5		1045.00		
	G Ramaiah Layout 1st Cross		1	188	5.5		1034.00		
	G Ramaiah Layout 1st Cross RHS		1	85	5		425.00		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5		440.00		
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6		990.00		
	Sai Arcade 3rd Cross Road		1	120	5		600.00		
	Sai Arcade 2nd Cross Road		1	120	5		600.00		
	Sai Arcade 1st Cross Road		1	115	6		690.00		
	Sai Arcade 2nd Main Road		1	135	5.5		742.50		
	Sai Arcade 1st Cross 1st A sub Road		1	41	3.5		143.50		
	Sai Arcade 1st Cross 1st B sub Road		1	40	3.5		140.00		
	Lake Road		1	332	6.5		2158.00		
						Sqm	11413.00	**10.6**	**120978**
	Basic Rate	**10**							
	Area Weightage @ 6%	**0.6**							
	Total	**10.6**							
16	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19								
		Cum							
	G Ramaiah Layout								
	G Ramaiah Layout Main Road		1	370	6.5	0.04	96.20		
	G Ramaiah Layout 2nd Cross		1	190	5.5	0.04	41.80		
	G Ramaiah Layout 1st Cross		1	188	5.5	0.04	41.36		
	G Ramaiah Layout 1st Cross RHS		1	85	5	0.04	17.00		
	G Ramaiah Layout 2nd Cross RHS		1	80	5.5	0.04	17.60		
	Sai Arcade								
	Sai Arcade 1st Main Road		1	165	6	0.04	39.60		
	Sai Arcade 3rd Cross Road		1	120	5	0.04	24.00		
	Sai Arcade 2nd Cross Road		1	120	5	0.04	24.00		
	Sai Arcade 1st Cross Road		1	115	6	0.04	27.60		
	Sai Arcade 2nd Main Road		1	135	5.5	0.04	29.70		
	Sai Arcade 1st Cross 1st A sub Road		1	41	3.5	0.04	5.74		
	Sai Arcade 1st Cross 1st B sub Road		1	40	3.5	0.04	5.60		
	Lake Road		1	332	6.5	0.04	86.32		
						Cum	456.52	**8622.04**	**3936134**
	Basic Rate	**8134**							
	Area Weightage @ 6%	**488.04**							
	Total	**8622.04**							
17	KSRRB M800-13. Providing and laying of **hot applied thermoplastic** compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16).								
		Sqm							
	G Ramaiah Layout								
	G Ramaiah Layout Main Road		2.5	370	0.1		92.50		
	G Ramaiah Layout 2nd Cross		2.5	190	0.1		47.50		
	G Ramaiah Layout 1st Cross		2.5	188	0.1		47.00		
	G Ramaiah Layout 1st Cross RHS		2.5	85	0.1		21.25		
	G Ramaiah Layout 2nd Cross RHS		2.5	80	0.1		20.00		
	Sai Arcade								
	Sai Arcade 1st Main Road		2.5	165	0.1		41.25		
	Sai Arcade 3rd Cross Road		2.5	120	0.1		30.00		
	Sai Arcade 2nd Cross Road		2.5	120	0.1		30.00		
	Sai Arcade 1st Cross Road		2.5	115	0.1		28.75		
	Sai Arcade 2nd Main Road		2.5	135	0.1		33.75		
	Sai Arcade 1st Cross 1st A sub Road		2	41	0.1		8.20		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Sai Arcade 1st Cross 1st B sub Road		2	40	0.1		8.00		
	Lake Road		2.5	332	0.1		83.00		
						Sqm	491.20	**454.74**	**223368**
	Basic Rate	429							
	Area Weightage @ 6%	25.74							
	Total	454.74							
18	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
		Sqm							
	G Ramaiah Layout								
	G Ramaiah Layout 2nd Cross		2	190	0.9		342		
	G Ramaiah Layout 1st Cross		2	188	0.9		338.4		
						Sqm	680.40	**2337**	**1590095**
	Data Rate	**2337**							
19	5.29(b) Providing and fixing **pre cast solid cement concrete kerb stones** made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
		Sqm							
	G Ramaiah Layout								
	G Ramaiah Layout 2nd Cross		2	190			380		
	G Ramaiah Layout 1st Cross		2	188			376		
							756		
				l,e 1795/0.45			1680		
						Sqm	1680.00	**432.48**	**726566**
	Basic Rate	**408**							
	Area Weightage @ 6%	**24.48**							
	Total	**432.48**							
20	KSRB 15-18.2 : Providing and applying **enamel metal paint two coats** (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.. (P.No.123, I.No.15.74 of PW, P&IWTD SR 2018-19)								
		Sqm							
	G Ramaiah Layout								
	G Ramaiah Layout 2nd Cross		2	190		0.4	152		
	G Ramaiah Layout 1st Cross		2	188		0.4	150.4		
						Sqm	302.40	**100.7**	**30452**
	Basic Rate	**95**							
	Area Weightage @ 6%	**5.7**							
	Total	**100.7**							
21	KSRRB 300-26.2 For **Lead for Disposal** of Debris shall be payable at carriiage rates by Mechanical means including loading and unloading. From 0.00 to 2.00 Km (Page no:136)								
		Cum							
	Quantity vide Item eartwork and Stone Boulders					Cum	2000.33	**87.556**	**175140**
	Basic rate for haulage of material as per item no. 17.4 (Rs.2)								
	Average weight of earth 1.28 tonne/ kg for (2x1.28x10.00)	25.6							
	Add loading and unloading vide item no:17.1	57							
	Basic Rate	82.6							
	Area Weightage @ 6%	4.956							
	Total	87.556							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							Grand Total		17066860
22	For 12% Applicable GST								2048023
23	For 4% KRIDL Charges								682674.4
24	For 1% DPR and PMC Charges								200000
25	Miscellaneous Charges	L/S							2442.6
									20000000

Certificate:

1. The work spot has been inspected and the work is found necessary.
2. This estimate is prepared as per PWD SR of 2018-19
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Junior/Assistant Engineer

AE-3

Executive Engineer
Yelahanka Division

Assistant Executive Engineer
Yelahanka Sub Division

Transheight Consultants P. Ltd. Bangalore

Administrative Sanction for Rs. 200.00 lacs/kh
Two Crore only
is accorded under head P-3749
CM - Navanagarothana - 11a - Village
grants Annexure-07
Subject
to conditions
No EE/YNK/61/2019-20 7/11/2019

Executive Engineer

Technical Sanction
Accorded For RS 200 lacs
Head of A/C P-3749
CER NO : 203 Dt: 05.11.2019

AA CE (YNK)